UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460



OFFICE OF AIR AND RADIATION

March 6, 2006

Suzhou Powerhouse Co., Ltd. No. 15 Yanshan West Road Town of Chengxiang, Taicang City Jiangsu Province, China Postcode: 215400 Contact Person: Bob Ho

Dear Bob:

EPA has reviewed the Testing Documentation submitted by Suzhou Powerhouse Co., Ltd. for the following lamp/ballast combination, and determined that it meets the Version 4.0 Residential Light Fixture (RLF) specifications indicated below. Suzhou Powerhouse Co., Ltd. may provide this Letter of Qualification to other manufacturers interested in qualifying the same lamp/ballast combination for ENERGY STAR. Those manufacturers may, in turn, submit a copy of this Letter in lieu of lab testing reports for the given performance characteristics. Please note that this Letter of Qualification only covers the performance requirements in the table below.

Components: Ballast(s) Manufacturer Tospo Electronics Co., Ltd. Model # TP120-1/26UPL Lamp(s) Manufacturer Shanghai Chuanshi Technical Co., Ltd Model # 95040

of Lamps: 1 Indiv. Listed Lamp Wattage: 26 Lamp Type: CFL Lamp Size: T4 Ballast Type: Electronic

Performance Characteristic	Test Result		Meets ENERGY STAR Specification? (Yes/No)		
Combined Lamp & Ballast Requirements:					
System Efficacy	<u>1749.54</u>	Total Lumen Output	Yes		
	<u>24.4</u>	Input Power (watts)	Yes		
	<u>71.67</u>	Lumens Per Watt	Yes		
Lamp Requirements:					
Lamp Life	<u>10000</u>	Average Rated Hours	Yes		
Lumen Maintenance	80.80	% of initial lumens at 40% rated lamp life (4,000 hour minimum)	Yes		
Color Rendering Index	82.29	CRI	Yes		
Lamp Correlated Color Temp.	3500	Target CCT (degrees Kelvin)	Yes		
	<u>100</u>	% of samples fall within 7-step Mac Adam ellipse			
Lamp/Lampholder Compatibility	<u>G24q-3</u>	ANSI-IEC Designated Lamp Base Type	Yes		
	Yes OR No	ANSI-IEC Standardized Lamp	Yes		
	2526 OR N/A	ANSI-IEC Lamp Standard Data Sheet Number			
Lamp Labeling Requirement		Lamp labeling requirement is met	Yes		

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Ballast Requirements:			
Lamp Start Time	<u>90</u>	Milliseconds	Yes
Power Factor	0.523		Yes
Lamp Current Crest Factor	1.53		Yes
Maximum Recommended Ballast Case Temperature During Normal Operation Inside a Fixture	<u>90</u>	Degrees Celsius	Yes
Electromagnetic and Radio Frequency Interference		Ballast meets FCC requirements for consumer use	Yes
Ballast Frequency	<u>55.89</u>	kHz	Yes
Transient Protection		Ballast meets transient protection requirements	Yes
End of Life Protection (Only required for ballasts with lamps sized T5 & smaller)	Yes OR N/A	Testing requirements are met	Yes
	<u>1</u> OR N/A	Maximum number of lamps shut down when lamp end of life occurs	
Dimming		3-Way Switching	Yes
		Continuous Dimming	
Safety – Ballasts and "Non Edison base Fluorescent Adapters"	Yes OR N/A	Listed for Safety	RLF or ceiling fan partner using this form in lieu of testing documentation must submit appropriate safety report for portable or hardwired fixtures.
Line Voltage Socket (LVS) Standard Design	This platform does OR does not use the twist-and-lock LVS standard Design		Yes
Line Voltage Socket (LVS) Standard Design with Self-Ballasted Pin-Based Lamp	This platform does OR does not ship with self-ballasted pin-based lamps (i.e., integrated lamp and ballast) that use the twist-and-lock LVS standard design		Yes

As a reminder, the approved lamp/ballast combination does not receive the ENERGY STAR label and can not be promoted as an ENERGY STAR approved product and can not carry the ENERGY STAR logo. Rather, you may promote this approved platform as an acceptable alternate to providing test reports with Residential Light Fixture submittals for ENERGY STAR qualification.

Any RLF or ceiling fan partner submitting this Letter of Qualification in lieu of laboratory testing reports is still responsible for completing and signing a Qualified Product Information (QPI) form for the applicable lamp/ballast combination, and submitting any required test data not covered by this Letter.

Please contact Evan Haines at (703) 218-2535, or myself at (202) 343-9397 with any questions. Thank you for your continued support.

Sincerely,

David Shiller, Product Manager

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ENERGY STAR for Residential Light Fixtures

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